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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/824,281	04/02/2001	Masahiro Morishita	01197/LH	9235
1933	7590	10/01/2003	EXAMINER	
FRISHAUF, HOLTZ, GOODMAN & CHICK, PC			HUG, ERIC J	
767 THIRD AVENUE			ART UNIT	
25TH FLOOR			PAPER NUMBER	
NEW YORK, NY 10017-2023			1731	

DATE MAILED: 10/01/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

AS

Office Action Summary

Application No.

09/824,281

Applicant(s)

MORISHITA ET AL.

Examiner

Eric Hug

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 July 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,3,4 and 9-11 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 11 is/are allowed.
- 6) ☒ Claim(s) 1,3,4 and 9 is/are rejected.
- 7) ☒ Claim(s) 10 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 02 April 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on July 23, 2003 has been entered.

Claim Rejections - 35 USC § 103

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

1. Claims 1, 3, 4, and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Berkey (4,822,389) in view of Majkrzak et al (US 2,711,055).

Berkey discloses an optical fiber splice made by providing a hollow glass cylindrical member having a bore (glass tube having an internal hole), supplying a pressurized fluid to the bore, heating a portion of the glass to soften it, forming a bubble in the heated portion of the glass by way of the pressurized fluid, and then cutting the glass at the location of the hole to form an optical fiber splice having tapered ends. See Abstract, Figs. 1-5, and claim 1 in column 7, lines 44-57. With regards to claim 3, the cylindrical member may be subjected to a drawing force (column 4, lines 48-55) and Berkey notes that drawing is well known in the art. With regards to claim 4, Berkey show severing or cutting (Abstract and Fig. 3). With regards to

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claim 9, tapered portions are described at column 1, lines 8-9. Unlike the present invention, Berkey does not disclose that the tube is placed into a frame and then heated by applying heat through the frame, whereby the frame restricts an increase in the outside diameter of the tube.

Berkey discloses that it may be desirable to retain the outside diameter of the formed part by applying a force to the cylindrical part along the longitudinal axis while the bubble is being formed (column 4, lines 43-48). Berkey states this without disclosing a specific means for applying the force, and therefore does not disclose the claimed frame. However, one would envision a device that surrounds the tube along at least a portion of the length of the tube where the bubble is formed. Majkrzak discloses a method of reshaping tubular stock without increasing the outer diameter. The method includes providing a mold about the circumference of glass tube, providing heat to a region of the glass tube through the mold via an induction heater that surrounds the mold, and providing a pressurized fluid through the glass tube to shape the internal diameter of the tube in the heated region. At the time of the invention, it would have been obvious to one skilled in the art to surround the glass tube of Berkey with a mold (equivalent to the instant frame) to maintain the outer diameter of the tube and provide heating through the mold to maintain heat to the heated region while shaping the interior diameter with the pressurized fluid.

Allowable Subject Matter

Claim 10 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claim 11 is allowed.

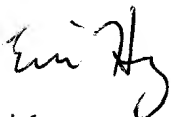
The following is a statement of reasons for the indication of allowable subject matter:

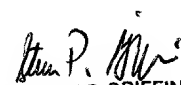
The claims are allowable as indicated in the previous office action, primarily for the additional features of joining a plurality of glass elements together to form a glass periphery and a through hole, and then drawing the glass elements to form a tube.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Eric Hug whose telephone number is 703 308-1980. The examiner can normally be reached on Monday through Friday, 9:00 AM to 6:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Steven Griffin can be reached on 703 308-1164. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703 308-0651.


jeh


STEVEN P. GRIFFIN
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 1700